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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/060,313	04/15/98	LINEBARGER	TN-104

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WM02/1105

EXAMINER ARMSTRONG, A

ART UNIT 2641	PAPER NUMBER
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DATE MAILED: 11/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/060,313

Applicant(s)

LINEBARGER ET AL.

Examiner

Angela A. Armstrong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 21 are objected to because of the following informalities: as written claim 21 does not indicate that the method for conducting speech therapy is a computer implemented method (as the specification teaches). Applicant is requested to amend the claim to correspond to the teachings of the specification.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 10-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wen (US Patent No. 5,562,453) in view of Nojima (JP 409122106A) and Takebayashi et al. (US Patent No. 5,357,596).

4. Regarding claims 1, 2-5, 12-16, and 21-33

“visual display device...” is taught by Wen at Figure 1, element 5 and col. 3, lines 8-48;

“microphone...” is taught by Wen at Figure 1, element 2 and col. 3, lines 8-48;

“speaker...” is taught by Wen at Figure 1, element 6 and col. 3, lines 8-48;

“processor...” is taught by Wen at col. 3, lines 8-48 as one of the standard computational functional units of a computer to perform functions of input, output, computation, control and memory;

“displaying a picture”, (see column 4, lines 6-7 where Wen discloses that the system prompt displays a picture of the item selected category);

“generating a speech prompt”, (see column 4, lines 5-6 where Wen discloses that the system provides the user with a “first vocal prompt”);

“inputting a speech response”, (see column 3, lines 10-11 where Wen discloses that the input to the system is via microphone);

At col. 4, lines 55-57, Wen teaches a scenario in which the user is prompted with the question “What color is this flower” and the user may respond with “That lower is white”. However, Wen does not specifically teach user identification of a plurality of aspects or prompting for a sentence description of the aspects. However, refer to Nojima (EP101322 A1 English Equivalent Document of JP 409122106A) who teach presenting a cartoon (a plurality of pictures or aspects) to a user (page 3, lines 13-16), prompting the user to provide a description of the contents of the picture (page 5, lines 33-63) wherein the description of the aspects is in a sentence structure and determining if the user provided description accurately describes the picture (page 6, lines 24-51). Nojima teaches that the invention is applicable in judging the health of recognition and understanding of a subject (page 2, section entitled “Technical Field”).

Therefore, it would have been obvious to one of ordinary skill at the time of invention to modify the system of Wen to implement displaying of a plurality of pictures or aspects, prompting a user to provide a description of a plurality of aspects in a display in a sentence

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structure, and determining if the user provided description accurately describes the aspects as taught by Nojima, for the purpose of judging the health of recognition and understanding of a subject, as suggested by Nojima.

Wen does not specifically teach “performing speech recognition” and “performing natural language analysis...analyzing content...recognized words as synonyms...accepting synonyms...”. However, refer to Takebayashi et al. who teach a speech dialogue system for improving human-computer interaction which the system performs semantic understanding of a user’s spoken words (refer to col. 8, lines 3-68 continuing to col. 16, lines 1-17).

Therefore, to the extent that Wen does not teach “performing speech recognition” and “performing natural language analysis”, it would have been obvious to one of ordinary skill at the time of invention to modify the biofeedback training system of Wen to implement a speech understanding and dialogue management system as taught by Takebayashi et al. because such a modification would improve the system evaluation of the user which improve the performance of the training tutor.

Wen does not specifically disclose a method of conducting speech therapy. Wen discloses operational examples for using the system, which teaches how one would implement the system in a speech training environment. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the system disclosed by Wen and apply the operational examples as taught by Wen to develop a computerized method for conducting speech therapy. Wen teaches that such a use of her system would be a tremendous advantage for a user when a person is not available to assist in training.

Regarding claims 6-8 and 17-19, "...altering a visual characteristic..." is taught by Wen at col. 4, lines 55-62.

Regarding claims 10, 11, and 20, "speech prompt...activated by an icon..." is taught by Wen at col. 4, lines 63-68 continuing to col. 5, lines 1-3.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wen in view of Nojima and Takebayashi et al. as applied to claim 1 above, and further in view of Shpiro et al. (US Patent No. 5,487,671).

Regarding claim 9, "...replaying the speech response". Neither Wen, Nojima, nor Takebayashi teach replaying a speech response. However, refer to Shpiro et al. who discloses a computerized system for teaching speech in which the system replays the user's response to a testing sequence (Figure 5B, step 520).

Therefore, to the extent that Wen, Nojima and Takebayashi et al. do not replay a user's response, it would have been obvious to one of ordinary skill at the time of invention to modify the training system of Wen to implement the speech understanding system of Takebayashi et al. and to further modify the system to replay the user's response to testing sequences as taught by Shpiro et al., because such a modification would provide a means for the user to know that the system is capturing and analyzing their intended response.

Response to Arguments

6. Applicant's arguments filed August 24, 2001 have been fully considered but they are not persuasive.

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7. In response to applicant's arguments that generating a speech prompt for information describing each a plurality of aspects of the picture is not taught, the examiner disagrees and argues that Wen teaches generating a speech prompt for information describing an aspect of a displayed picture and Nojima teaches displaying a picture with a plurality of aspects. Thus, the combination of the teachings of Wen and Nojima would provide for generating multiple speech prompts for information describing a plurality of aspects of a displayed picture.

8. In response to applicant's arguments that Nojima does not teach prompting the user to provide a description of the contents of a picture and applicant's request for a specific citation to this description, applicant is referred to the Nojima English Equivalent Document page 5, lines 33-63.

9. In response to applicant's arguments that the stated purpose for modifying the Wen reference with the Nojima reference is without merit, applicant is referred to the Nojima English Equivalent Document page 2, section entitled "Technical Field" wherein Nojima teaches that the system of presenting a cartoon (a plurality of pictures or aspects) to a user, prompting the user to provide a description of the contents of the picture, wherein the description of the aspects is in a sentence structure and determining if the user provided description accurately describes the picture is applicable in judging the health of recognition and understanding of a subject.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

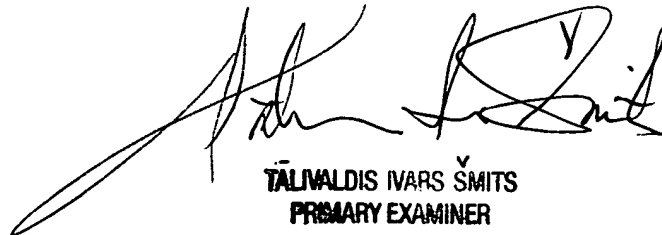
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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 703-308-6258. The examiner can normally be reached on Monday-Thursday 7:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on 703-305-6137. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-6306 for regular communications and 703-308-6296 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

AAA
November 2, 2001



TĀLVALDIS IVARS ŠMITS
PRIMARY EXAMINER